Association Business

AMERICAN POTATO JOURNAL SUBJECT AND AUTHOR INDEX VOLUME 71, 1994

Subject Index

Analysis
- Antogenetic model, 165, 172
- Biological assay for PVY, 621
- Chip color analysis, 717
- Cluster analysis for RAPD's, 542
- Diagnostic assays for baterial ring rot, 557
- DNA hybridization assay (DHA), 557-564
- DNA analysis for cultivar identification, 535
- HPLC liquid chromotography analysis, 61, 64, 66
- Image analysis of color, 728, 732
- Latex agglutination (LAT), 557-564
- Path coefficient analysis, 166, 167
- QTL analysis, 583
- RAPD analysis, 535

Bacteria
- Bacterial ring rot reactions, 517, 522-524
- *Clavibacter michiganse* subsp. *sepedonicum*, 517-519, 521, 522, 557-560, 563, 564
- *Corynebacterium sepedonicum*, 96
- *Erwinia caratovora* subsp. *atroseptica*, 100-352, 619, 620
- *Erwinia caratovora* subsp. *caratovora*, 100, 102
- *Erwinia chrysanthemi*, 100

Canopy temperatures, 157, 159-161

Chemicals
- Alkaline phosphatase, 571
- Berberine/ruthenium red, 494, 496
- Bovin serum albumi, 559
- Butylated hydroxyanisole, 6
- Carborundum, 569, 620
- C1C31 suspension, 521
- Copper sulfate, 747
- Dimethyl sulfoxide, 186
- Ethanol, 102
- KCl, 559
- Myo-inositol, 521
- Myveral, 807
- NaCl, 559
- NaOH, 559
- PBST buffer, 559
- Paraplast plus, 494
- Phosphate buffer, 559
- P-Nitrophenyl phosphate, 570
- Polyethylene beads, 833
- Polyvinyl chloride beads, 833
- Polyvinyl pyrralidone, 570
- Potassium phosphate, 833
- Quaternary ammonium, 745
- Sodium acid pyrophosphate, 3, 559, 720
- Sodium hypochlorite, 102, 521
- Sodium phosphate, 569, 620
- Sodium sulphite, 548, 549, 620
- Thramine-HCl, 521
- Tetracycline, 186
- Tween, 559, 570

Cochran's test, 559, 560

Cool processing cultivar, 237

Crop water stress indices (CWST), 155, 157, 159-163

Cultivar resistance to early blight, 321

Cultivar resistance to verticillium wilt, 39

Diseases
- Acid scab, 96, 245
- Bacterial ring rot, 96, 245, 392, 517-530, 557-563
- Bacterial soft rot, 99, 100, 103, 110, 246, 619, 620, 735
- Black dot, 455, 456
- Black scurf, 134
- Blackspot, 245, 411-413, 416, 814
- Common scab, 89, 245, 750
- Early bight, 89, 96, 134, 317, 814
- Early dying, 39, 134, 735
- Fusarium rot, 96, 185, 245
- Heat necrosis, 89, 242
- Hollow heart, 237, 242, 243, 814
- Late blight, 96, 317, 341-344, 392

Leafroll, 96, 377, 392
Net necrosis, 96
Pressure bruise, 244, 245
Potato stem rot, 805
Powdery scab, 805
Potato wart disease, 743
Rhizoctonia, 237
Silver scurf, 185, 591-595, 814
Stem canker, 134
Tuber greening, 245
Verticillium wilt, 17, 89, 134, 237, 467-479, 735, 736, 814
Disease suppression by nitrogen and phosphorus fertilization, 467-479
Drought stress, 829-832, 839
Equipment
Agtron M31A color meter (green mode), 717, 718, 723, 731
Atomic absorption spectrophotometry, 820
Automated iron analyzer, 421
Belco Kaputs, 287
Bio Oven III, 537
Deep fat fryer G.E. Model CK40A, 4
Diffusion porometer LI-1600, 159
HBO 50W/L2 mercury lamp, 494
Hobart abrasive peeler Model 6115, 3
Hunterlab D251-2 colorimeter, 717, 718, 723
Keen Kut Shoe Stringer, 79
Leaf Area Meter Model LI-3050A, 834
Magenta vessels, 287, 521
MC100 camera, 494
Microplate reader Model EL311, 119
Multiskan titertek spectrophotometer, 177
PC-Vision Plus 80486 computer, 722
Pendulum bruiser, 102
Photovolt reflectance meter, 577, 670
Prometer LI-COR Model LI-1600M, 343
Roller press, 177
Specific-iron electrode NO_3-N, 820
Tensiometers, 156
TSH plates, 519
Wild Heerbrugg M8 stereomicroscope, 407
WV-CD50 Video camera, 721
Zeiss axloskop microscope, 494
Evapotranspiration, 834
Extractable soil water, 829, 831, 836, 837, 839
Fertilization
CL-NO_3 interactions in potatoes, 251, 419
Comparison of petiole position selected for nutrient analysis, 822-824, 847
Diagnostic tests for nutrients in potatoes, 818
Effect of N and P on verticillium wilt, 467-479
Element concentrations in petioles, 254-263
Element interactions in potato petioles, 249, 263, 417, 430
Interactions of inorganic anions, 251, 261, 263
Interactions of organic anions, 251, 261
Ionic balance of elements, 251, 264
K fertilization of potatoes, 249, 417
K fertilization effects on tuber sugars and starches, 433-452
Level of nitrogen fertilization, 165
N fertilization of potatoes, 165, 249, 417, 418
N fertilization effects on tuber sugars and starches, 433-452
Nutrient concentration relationships, 817
Nutritional monitoring, 817
Nutritional status of growing crops, 817
Petiole analysis, 252, 253, 417, 419, 426
Petiole nitrogen concentrations, 428
Petiole potassium concentrations, 428
Petiole sampling, 817
Potassium sources, 249, 417-418, 433, 436
Timing of nitrogen fertilization, 165-173
Field performance of RBM-134, 415
Fungi
Alternaria solani, 89, 96, 245, 317, 321, 322, 392
Alternate hosts for *H. solani*, 596
Botrytis cineraria, 461
Collectotrichum coccodes, 42, 455-463, 456, 797, 800, 801-806
Fungal pathogens, 797, 798, 800, 802, 807
Fusarium spp., 41, 186, 187, 190
Fusarium avenaceum, 185, 187
Fusarium culmorum, 185, 187, 245
Fusarium equiseti, 185, 187
Fusarium sambucinum, 185-191, 245
Fusarium roseum, 245
Fusarium solani, 96, 134, 185, 187, 245
Helminthosporium solani, 185-191, 591-598
Helminthosporium solani isolates, 593
Phytopthora infestans, 96, 245, 317, 341-344, 392, 588, 750
Phytopthora parasitica, 41

Population levels of 4 fungal pathogens following several rotation crops, 801
Potato stem rot and wilt resistance following selected rotation crops, 803-804
Resistance of *Fusarium* spp. to TBZ and TPM, 188
Resistance of *H. solani* to TBZ and TPM, 189
Rhizoctonia solani, 96, 134, 237, 246, 619, 620, 750, 798, 800
Synchytrium endobioticum, 743-746
Verticillium spp., 11
Verticillium albo-atrum, 89, 96, 134, 237, 735, 736, 739, 798, 800
Verticillium dahliae, 39-55, 246, 467-469, 735, 736, 739, 798, 800
Fungicide resistance, 455
Management of early blight and field resistance, 317, 321
Fungicides
CGA173556, 455-463
Chlorothatonil, 117, 318
Fixed coppers, 318
Imazabil, 455-463
Iprodione, 318
Mancozeb, 318
MNB Maneb, 318, 455-463
Phenylpurrole, 455-463
Thiabendazole (TBZ), 185-191, 455-463, 592
Thiopphanate-methyl (TPM), 185-191
Triphenyltinhydroxide, 318
Genetic engineering of potatoes, 347-358
Plant antibodies, 349
Resistance to bacterial pathogens, 352, 353
Resistance to fungal pathogens, 353, 354
Resistance to insects and nematodes, 354, 355
Resistance to virus diseases, 350, 351
Transformation systems for genes, 348, 349
Glycoalkaloids in foliage, 228, 229, 255
Glycoalkaloids in tubers, 228, 229, 255
Glycoalkaloids, 297-313, 741, 814
ß-solamarine, 225, 226
α-solanine, 197
α-chaconine, 197
Demissidine, 197
Enzyme immunoassays, 297, 298
Monoclonal Antibody production (MAB), 297-313
Myeloma, 306, 312
Polyclonal antibodies (PAB), 298
Protein conjugates, 300
Solanidine, 297, 306
Splenocytes, 306, 312
Genetic engineering of potatoes, 347-358
Plant antibodies, 349
Resistance to bacterial pathogens, 352, 353
Resistance to fungal pathogens, 353, 354
Resistance to insects and nematodes, 354, 355
Resistance to virus diseases, 350, 351
Transformation systems for genes, 348, 349
Growth regulators
AC239,470, 395, 397
AC239,604, 395, 397
AC243,654, 395, 397-402
Benzyl adenine, 396
Benzyl nitroguanidine, 395
Cytokinins, 396
Gibberellic acid, 521, 548
Melanin, 412
Napthalenacetic acid, 410
Tyrosine, 412, 413
Herbicides
Metribuzin, 241, 289, 380, 470
Pendimethalin, 289
Insects
Aphids, 31, 115, 116
Collectatrichum coccodes, 42, 455-463
Colorado potato beetle, 117, 405, 407
ELISA, 115, 118-124
Leptinotarsa decemlineata, 31, 406
Myzus persicae, 116, 268, 269
Resistance to CPB, 406, 407, 409
Insecticides
Aldicarb, 289
Carbaryl, 117
Endosulfan, 117
Permethrin, 117
Temik 15G, 398
Infrared thermometry, 155, 157
Integrated Pest Management (IPM), 318
Irrigation
Management practices, 24, 25
Scheduling, 155
Computer assisted, 155, 156, 158-163
Neutron probe, 155, 157-163
Sprinkler versus furrow irrigation, 15-26
Leaf growth, 829, 830, 833-839
Leafroll virus resistance, 115-126

Leaf transpiration, 829, 831-834, 837, 838
Leaf water potential, 159, 162
Media
  Difco Czopek-Dox broth, 736
  Difco potato dextrose agar, 736
  Metro-mix, 350, 521
  MMS media, 521
  Murashige-Skoog media, 268, 287, 52`
  Nova mix, 548
  Peters solution, 521, 833
  Potato dextrose agar, 186, 736
  Promix B_X, 567
  V8 agar, 457, 593, 594
Morphological changes from growth regulators, 395-404
Nematodes
  Globodera pollida, 602
  Globodera rostochiensis, 341, 342, 739
  Golden nematode, 237
  Meloidogyne spp., 41
  Potato cyst nematode, 519, 735
  Pratylenchus crenatus, 800
  Pratylenchus penetrans, 39-55, 797, 799-803, 806
PAA Affairs
  Abstracts of papers presented at the 78th Annual Meeting of PAA, 659-713
  Book Review - "Potato Genetics", 553
  First call for papers for 79th Annual Meeting of PAA, 753
  First call for Graduate Student Awards Competition papers, 755
  First call for Honorary Life Member Nominations, 758
  Honorary Life Members for 1994
    Florian L. Lauer, 605
    Robert L. Mercer, 609
    Robert L. Sanders, 611
  Index for Volume 71 (1994) of the APJ, 853-875
  Author index, 863
  Subject index, 853
Journal Peer Reviewers for 1993, 614
Last call for papers for 78th Annual Meeting of PAA, 70
Last call for Graduate Student Awards Competition papers, 72
Last call for Nominations for Honorary Life Memberships, 74
Minutes of 1993 Annual Business Meeting, 200
Minutes of 1993 Executive Committee Meeting, 193
Minutes of New 1993-94 Executive Committee Meeting, 207
Minutes of 78th (1994) Annual Meeting, 761-795
  Business meeting, 769
  Executive Committee, 761, 774
Obituaries
  Robert V. Akeley, 841
  Jimmie Gregory, 843
  Elizabeth Murphy, 845
  Gavin Weiss, 483
Outstanding paper awards for 1993, 614, 783
Potato germplasm catalog, 69
Potato variety handbook, 75
Preregistration for PAA Annual Meeting in Calgary, Alberta, Canada, 273-283
Program for Annual Meeting of PAA in Calgary, Canada, 359-376
  Reports for 1993 Committees
    Business Editor, 209
    Editorial Office, 214
    Executive, 220
    Finance, 208
    Graduate Student Awards, 216
    Honorary Life Membership, 215
    Journal Review, 214
    Membership Secretary, 213
    Site Selection, 215
    Treasurer's Report and Financial Statement, 210-212
  Reports from 1994 Committees
    Business Editor, 778, 779
    Editorial Office, 781
    Finance, 784, 785
    Graduate Student Awards, 783
    Honorary Life Membership, 782
    Membership Secretary, 780, 784
    Site Selection, 782
    Treasurer's Report and Financial Statement, 775-777
Retirement of Stanley J. Peloquin, 485
Section Reports for 1993
  Breeding and Genetics, 218
  Certification, 217
    Extension, 217
    Pathology, 219
    Physiology, 220
    Production and Management, 221
    Utilization, 222
Section Reports for 1994
  Breeding and Genetics, 786
  Certification, 786
    Extension, 788-790

Pathology, 790
Physiology, 791
Production and Management, 792-794
Utilization, 794
Second call for papers for the 79th Annual Meeting of PAA, 847
Second call for Graduate Student Awards Competition papers, 848
Second call for Honorary Life Member Nominations, 850
Selection procedures for Honorary Life Membership in the PAA, 758, 851
Symposium 1993 - "Can We Break The Chemical Dependency?", 317-347
Periderm maturation, 489-493, 500, 504
Periderm permeability, 489, 491-493, 502, 503
Phellem tissue, 489-494, 501, 504
Philloderm tissue, 490
Phillogen tissue, 490
Plant species
Alfalfa, 41, 591, 597, 831
Alsike clover, 799
Annual ryegrass, 799
Apple, 536
Barley, 251, 519, 830
Beets, 592
Broccoli, 536
Buckwheat, 591, 797, 798
Carrots, 592
Cauliflower, 536
Celery, 536
Chenopodium amaranticolor, 268
Chenopodium quinoa, 268
Cora, 591, 597
Cotton, 831
Cowpea, 831
Cucumber, 830
Datura metel, 570
English pea, 799
Fodder beet, 251
Gomphrena globosa, 570, 617, 620
Grain sorghum, 831
Kiwifruit, 251
Lycopersicom pimpenellifolium, 547
Maize, 519
Nicandra physaloides, 547, 550
Nicotina debneyi, 570
Nicotina tobacum, 268, 508, 617, 621
Oats, 591, 597, 799
Parsnip, 592
Physalis angulata, 547, 550, 570
Pigeon peas, 831
Rapeseed, 591
Red clover, 591, 799
Rice, 519
Snapbean, 251
Soybean, 251, 831
Sugarbeet, 251, 830
Sweet corn, 830
Sweet potato, 592
Tobacco, 567
Tomato, 251, 830
Turnip, 592
Vigma mungo, 831
Wheat, 591, 597
Winter rye, 591, 597
Winter wheat, 799
Porometric technique, 489-505
Potato breeding
Accessions of *Solanum* spp. used for molecular mapping, 520
Agrobacterium tumifaciens, 286-289, 348
Autoradiogram of *Eco* RI digested DNA, 526
Breeding in Russia, 749-752
Concerns of regulation for transgenic potatoes, 649
Construction of genetic map, 339
Construction of transgenic potato lines, 289, 290
Cultivar improvement by selection, 133
Cultivar release in Russia, 751
Diagnostic host plant for PVA, 548
Diploid breeding lines derived from land and wild germplasm, 601
Diploid potato germplasm, 599, 617
Electrophoresis, 537
Enzymatic discoloration, 412
Genetic analysis of chip color, 629-644
Genetic diversity of Japanese potatoes, 543
Genetic engineering, 648
Genetic resistance to PVY^{O}, 617
Genetic resistance to systemics, 325-339
Germplasm availability for pest control, 330
Germplasm availability for disease resistance, 325
Haploids from pseudogametic parthenogenesis, 602, 749
Immunofluorescent antibody, 522
Inheritance of chip color, 640-644
Inheritance of chip color at 24 chromosome level, 629, 631-634
Molecular mapping, 520

Molecular mapping for immunity genes, 517, 527
Molecular mapping for resistance genes, 517, 527
Multiple resistance to virus diseases, 381
Mutation induction, 412
Oligonucleotide assay, 517, 522
Oligonucleotide primers (RAPD's), 517, 519
Outlook for chemical versus genetic control of potato pests, 326-330
Phu-Stn clones, 617, 619, 620
Polymorphic DNA (RAPD's), 581-583, 586
Polymorphism (RFLP), 517, 519, 526-529
Polymorphisms (RFLPs), 581-583, 588
Quantitative resistance to *Phytophthora infestans*, 342, 343
RAPD analysis, 523, 528, 529
RAPD patterns for selected potato cultivars, 538, 540
RFLP analysis, 523
RFLP linkage map, 340
RFLP mapping, 339-345, 581, 582, 585, 588
RFLP markers, 339-345, 517, 522, 530, 581, 586, 599
Seed tuber size from TPS, 29
Serological testing, 522
Somatic hybrids, 99, 101, 111
T-DNA insertional mutagenesis, 286
Transgenic constructs, 285
Transgenic plantlets, 286
Transgenic Lemhi Russet performance, 285, 292
Transgenic potatoes, 647
Transgenic Russet Burbank performance, 285, 292
True potato seed, 29, 548, 550, 751
TPS techniques in Italy, 29-38
Verticillium resistant germplasm, 735
Wild and land race genetic resources, 599
Potato cultivars (new)
AC Ptarmigan, 387-394
MaineChip, 237-248
Prestile, 89-96
Goldrush, 809-815
Potato cultivars (old)
Abnaki, 96, 117, 118, 246, 736
Allegany, 507, 509, 511, 513
Achiana, 148, 151, 152
Araucana, 148, 149, 152
Arsy, 35
Atlantic, 92, 93, 101, 103, 106-109, 239-241, 503, 509, 511, 513, 631
Bansei-danshaku, 537
BelRus, 117, 118, 834, 836-838
Bintje, 509, 511, 513
Bonaerense, 145
Boone, 238
Butte, 737
Castile, 321, 322
Chacay, 148, 149, 151, 152
Cherokee, 90
Chipbelle, 238
Chippewa, 633, 745
Claustar, 167, 169
Connestoga, 719
Dark Red Norland, 593-595
Delta Gold, 90
Draga, 167, 169
Earlaine, 90
Early Rose, 536, 537
Erie, 745
Essex, 745
Garnet Chili, 536
Green Mountain, 509, 511
Huinkue, 147-149, 151, 152
Imperia, 90
Irish Cobbler, 117-119, 536, 537, 744
Islander, 238
Jaerla, 167, 169
Jaga Kids Purple, 537
Jaga Kids Red, 537
Japanese cultivars, 535-544
Jemseg, 509, 511, 513, 569
Katahdin, 89, 91-94, 96, 101, 117-119, 239, 245, 246, 406, 407, 633, 834, 836-838
Kennebec, 35, 39-55, 92-94, 96, 145-148, 150-152, 229, 239-241, 418, 503
King Edward, 509, 511, 513
La Ballenera, 145, 148, 151
Latina, 148, 149, 152
Lemhi Russet, 287, 810
Lenape, 238
Mary Gold, 744, 745
May Queen, 536
Menominee, 90
Monona, 239-241, 503
Murasaki-imo, 536
Myatt's Ashleaf, 537
Nemuro-murasaki, 536
Nemurobeni, 537
Neodelicious, 537

New Superior, 133, 136, 139, 140
Nicola, 35
NorQueen Russet, 813
Norchip, 6, 12, 65, 101, 106, 107, 109, 238, 239, 489-502, 593-595, 719
Norgold Russet, 101, 103, 106, 107, 109, 133, 135, 136, 139, 140, 503, 737, 810-812
Norgold Russet M, 136, 137, 140
Norgold Russet #19, 133, 135-137, 140
Norgold Russet #35, 133, 135-137, 140
NorKing Russet, 8, 9, 811, 812
Norland, 101, 103, 106-109, 117, 118, 124, 249, 392, 489-503, 569, 595-596
Ontario, 89, 94
Pampeana, 145, 147-149, 151, 152
Pentland Crown, 509, 511, 513
Pentland Dell, 509, 511, 513
Pioneer, 810
Primicia, 145, 148, 149, 151, 152
Rankoku #3, 536
Rankoku #5, 536
Reddale, 39-55, 503, 739
Red Bliss, 745
Red Echo, 537
Red La Soda, 133-135, 140, 141
Red La Soda #5, 133, 135, 137, 140, 141
Red La Soda #10, 133, 135, 137, 140, 141
Red Norland, 593-595
Red Pontiac, 117, 118, 123, 167, 169, 170, 503, 745
Redsen, 503
Russet Bake King, 127
Russet Burbank, 4, 9, 12, 15-17, 59-67, 78, 79, 81, 94, 96, 101, 103, 106, 107, 109, 115, 117, 118, 129, 135, 146, 150, 155, 157, 245, 246, 249, 251, 252, 263, 287, 321, 379, 411-416, 419, 433, 436, 467-479, 489-503, 538, 717, 719, 735, 740, 811, 812, 817, 819
Russet Norkotah, 101, 103, 106, 107, 109, 503, 811, 812
Russet Rural, 744, 745
Russette, 39-55, 735, 739
Saco, 378
Sangre, 392, 530
Sebago, 117, 118, 121, 745
Serrana, 148, 151
Shepody, 59-67, 146, 150, 717, 719
Shirobana-danshaku, 537
Snowden, 240, 241
Somerset, 239
Spunta, 35, 145-149, 151, 152, 167, 169, 170
Sunrise, 92
Superior, 39-55, 92-94, 96, 101, 103, 106, 107, 109, 133, 140, 239, 245, 246, 390, 391, 395-398, 735, 738, 739
Surena, 145, 148, 151, 152, 745
Teton, 392
Tollocan, 35
Turia, 167, 169
Ute Russet, 530
Viking, 8, 9
White Rose, 631
Yellow shark, 537
Zalinge, 267-271
Potato cultivars (numbered seedlings)
245-2, 737
A081178-11, 11
A36-1, 810
A36-3, 388
A119-1, 737
A139-1, 737
A180-24, 810
A183-8, 737
A343-3, 388
A492-2, 737
A589-65, 737, 810
A63126-8, 810
A6536-5, 737, 738
A6673-4 Russ, 810
A681134, 738
A85519-6, 377, 380
A85530-10, 377, 380
AC25953, 238
AF186-2, 238
AF84-4, 238
AF875-16, 238
B0169-56, 735-740
B24-58, 90
B2919-1, 238
B3672-3, 90
B3692-4, 90, 737
B3819-17, 90
B5141-6, 238
B5052-7, 238
B5421-3, 90
B605-10, 90
B7160-4, 737
B78-501-131, 148, 149, 151, 152
B78-502-5, 148, 149, 151, 152
B79-540-180, 148, 149, 151, 152
B81-40, 90
B9020-18, 737, 738
B929-23, 90
B96-140, 90
B9922-17, 117, 118, 120

BR6293-12, 90
C008014-1, 90
CIP701624, 537
CIP704082, 537
CS7635-4, 90
F59103, 388
F76080, 388
MINN113-1-45, 810
ND388-1 Russ, 8, 9, 12
ND450-3 Russ, 810
ND534-4 Russ, 8, 9, 12
ND651-9, 8, 9, 12
ND671-4 Russ, 8, 9
ND860-2, 503, 540, 543
ND1538 Russ, 810
ND2475-8, 737
ND5281-8, 388
ND5502-15, 388
ND6993-13, 388
ND89M-5 Russ, 810
ND8917-5 Russ, 810
ND9852-1 Russ, 810
NEB225-41-1, 810
NVF100-1, 117, 118
PI161171, 567
PI160372, 567
PI257534, 509
PI258907, 378
PI383471, 509
PI472810, 225-227
PI472819, 567
PI473331, 406
PI473334, 406
PI473505, 567
PI498021, 567
PI500035, 548, 550, 551
PI558099, 548, 551
PI558098, 547, 550, 551
PI558099, 548, 551
PI558100, 548, 551
PI558101, 548, 551
R241-16, 380, 381, 383, 384
R247-1, 380, 381, 383, 384
RBM134, 411-416
TRP133, 583
UP88-P5, 31
UP88-P7, 31
UP88-C35, 30
UP88-204, 30
W231, 631
W760, 631
W842, 30
WASH245-2, 810
WASH330, 810
Wn12-3, 737
X96-441, 90
X96-56, 90
X245-52, 90
X528-170, 90
X7672-3, 90
X792-88, 90
X792-99, 90
Potato quality
After cooking darkening - Prestile, 95
Amino acids, 60, 582
Appearance ratings - Prestile, 95
Boiled potato quality, 145, 151, 152
Chem strips, 62, 66
Chip color, 581-588, 629, 632, 717, 718
Chip color for cultivars grown in Argentina, 151, 152
Chip color for Maine Chip grown in N.E. Regional tests, 239
Chip color - reconditioning, 629, 630, 632, 635, 636
Chip color reversion, 629, 631, 632, 636
Chip values - A.C. Ptarmigan, 391
Chipping stability, 635
Composition data for cultivars and clones grown in Argentina, 148
Cooking evaluations for cultivars and clones grown in Argentina, 151
Computerized video image of chip color, 717
Cooking quality, 145, 813
Dry matter, 145
Dry matter content of varieties grown in Argentina, 148, 149
Effect of slicing method on french fry color, 80, 81, 84
Effect of time delay on french fry color, 78, 79, 82
French fry color, 59, 60, 62, 64, 77, 78
French fry color versus irrigation, 21
French fry length and limpness test results, 5, 11
French fry quality factors, 1, 10
Frozen french fries, 77
Fructose, 59, 63, 582
Glucose, 59, 60, 63, 64, 67, 433, 440
Glycoalkaloids - Goldrush, 814
Glycoalkaloids - Prestile, 92
Hunterlab L. values, 719, 724
Image acquisition methods, 725
Image procedure, acquisition and analysis, 722
Maillard reaction, 60

Mean gray levels, 717, 719, 726, 727, 731, 732
Methods of french fry color determinations, 80-82
Non-enzymatic browning, 60, 62, 65
Processing quality, 60, 813
Reducing sugars, 59, 60, 62-64, 433-445, 582, 588, 630
Sensory evaluation of breeding clones, 1, 2, 3
Sensory evaluation of potato products, 8, 9
Specific gravity, 21, 145, 161, 240, 390, 413, 415, 420, 421, 424, 426, 479
Specific gravity of three cultivars grown in USA and Argentina, 150
Sucrose, 59, 60, 63, 64, 67, 433, 440
Sugar or dark end syndrome, 16, 77
Tes-Tape strips, 62, 66
Testing of flaked potatoes, 5, 6, 7
Testing of french fried potatoes, 3
Thick chip color, 728
Thin chip color, 729
Total solids for Goldrush, 812
U.S.D.A. standard fry color chart, 19, 61, 71, 80, 84, 86
Potato species (*Solanum*), 115, 325, 405, 518
acuale, 326, 378, 524-530, 517, 518, 619, 749, 750
andreanum, 326
berthaultii, 326, 405-409, 631, 749
brachycarpum, 567
brevidens, 99, 101, 106, 110, 378, 517-530
bukasovii, 631
bulbocastanum, 326, 750
candolleanum, 326
cardiophyllum, 326
chacoense, 90, 225-227, 567, 581, 587, 619, 631, 749
clarum, 326
colombianum, 326
fendleri, 647
gourlayi, 631
infundibuliforme, 524-528
jamesii, 652
kurtzianum, 631
leptosepatum, 652
maglia, 326
megistracrolobum, 525-527
microdontum, 547, 548, 749, 750
morelliforme, 326
multidissectum, 631
petota, 326
phureja, 524-528, 517, 518, 537, 581, 587, 600, 601, 619, 620
pinnatisectum, 326, 647, 652-654
polyadenium, 326
sanctae-rosae, 524-528
sparsipilum, 326, 567, 631
spegazzinii, 749, 750
stenatomum, 524-528, 600, 601, 617, 619, 620
stoloniferum, 326, 378, 567, 603, 619
tarijense, 631
tuberosum spp. *andigena*, 342, 377, 378, 535, 544, 600-602, 619
tuberosum, 40, 77, 89, 99, 101, 106, 110, 185, 517, 518, 527-530, 581, 587, 600, 601, 619, 629, 631, 798, 830
vernei, 326, 631, 749
verrucosum, 524-528, 531, 749
vidaurrei, 326
Potato wart disease eradication, 743-747
Seedpiece treatments, 396-401
Selection of petioles for nutrient analysis, 819, 821
Storage quality of MaineChip, 244
Suberin, 491-494
Tuber skin weight per unit of surface area for 12 cultivars, 503
Vapor conductance (tuber), 489-503
Vavilov Institute - Russia, 749
Viruses
Combined resistance to viruses, 377
Consecutive ELISA screening, 175
Cultivar responses to inoculation with PVA, PVY, and PVX, 510-514
DAS-ELISA, 268, 269
Diagnostic host plant for PVA, 548
Elimination of viruses from potatoes, 267-272
ELISA, 136, 175-184, 267, 380, 548, 557-564, 569, 570, 617-626
Extreme resistance to viruses, 508, 514, 624
Immunological detection of viruses with antibodies, 570
Immunosorbent electron microscopy (ISM), 267
ISM, 268, 269
Monoclonal antibodies, 175, 570
Monogenic hypersensitivity to viruses, 508
PLRV, 115-124, 267-271, 377-384, 750
PVA, 267-269, 507-514, 547-551, 567, 570, 618

PVM, 267-269, 548, 567, 570, 750
PVS, 267-269, 548, 567, 570, 618
PVX (group 3), 507-514
PVX, 373-384, 507-514, 547, 548, 550, 567, 570, 588, 617-626
PVY, 377-384, 507-514, 547, 550, 750
PVY^{O}, 267-270, 507-514, 548, 549, 567-572, 617-626
PVY^{C}, 569
PVY^{N} immune introductions, 576, 577
Reaction of *S. chacoense* and *S. sparsipilum* to PVN^{N}, PVY^{O}, and PVY^{C} to inoculations, 571-573
Solanum species reactions to PVY inoculations, 571-573
Sources of viruses X, Y, and A, 509
Variety resistance to viruses, 377
Veinal necrosis, 567
Virus antibodies, 175-184
Virus detection, 510
Virus immunity, 508, 514
Virus resistance, 507-514
Virus X, 89, 96, 245, 267-269, 341, 567, 570
Virus Y, 341, 377
Virus Y (PVY^{N}), 175-184, 267-269, 507, 514, 548, 549, 567-572
Water deficit effects, 829, 830, 834, 838, 839
Weed species (Solanum)
carolinense (horsenettle), 652
dulcamara (bitter nighshade), 651
elaeagnifolium (silverleaf nightshade), 651
nigrum (black nightshade), 651
ptycanthum (eastern black nightshade), 651
rostratum (buffalo burr), 651
sarrachoides (hairy nightshade), 651
torvum (turkeyberry), 652
triflorum (cutleaf nightshade), 651
Yields, 21, 33, 45, 46, 240, 241, 390, 400-402, 415, 420, 421, 423, 477, 740, 811
Yield-continuous cropping effects, 467, 468
Yield-influence of cultivar, 166-173
Yield-influence of N fertilization, 165-173
Yield of tuber numbers from TPS families from various crosses, 32, 33
Yields from TPS seedling tubers, 34

AUTHOR INDEX

ABELL, D.C. and P. SPORNS. Immunoassay conjugates for the potato glycoalkaloid tomatine, 659 (abst.)
ABELLO, F. *see* LOZOYA, H.
ADAM, L.R. *see* PRITCHARD, M.K.
ASHLEY, R. *see* BOHL, W.
AUSTIN S. *see* VAUGHN, S.F.
BAINS, P.S. *see* BISHT, V.S.
BAJEMA, R., G.M. HYDE and B.B. DEAN. Dynamic physical property measurement of potato tubers, 659 (abst.).
BAKER, T.R. *see* LOVE, S.L.
BALBYSHEV, N.F., B. FARNSWORTH, R.H. JOHANSEN and J.H. LORENZEN. Broadening the genetic base of CPB resistance, 660 (abst.).
BAMBERG, J.B. Screening potato species for male fertility in heat stress, 660 (abst.).
BAMBERG, J.B. *see* SPOONER, D.M.
BANDARA, M.S., K.K. TANINO and D.R. WATERER. Effect of plant growth regulators on seed tuber yield in Norland and Russet Burbank potatoes, 661 (abst.).
BARONE, A. *see* CARPUTO, D.
BARTA, J. *see* LEWIS, M.D.
BARTA, J.L. *see* THORNTON, M.K.
BELKNAP, W.R., D. CORSINI, J.J. PAVEK, G.W. SNYDER, D.R. ROCKHOLD and M.E. VAYDA. Field performance of transgenic Russet Burbank and Lemhi Russet potatoes, 285.
BELKNAP, W.R. *see* EBERLEIN, C.V.
BIEVER, K.D. and R.L. CHAUVIN. Resistance of potato cultivars to the Colorado potato beetle, 661 (abst.).
BINNING, L.K., T.R. CONNELL, W.R. STEVENSON, J.A. WYMAN, D. CURWEN, K.A. KELLING and D.J. HEIDER. Preventative crop and pest management programs for farming systems involving potatoes, 661 (abst.).
BINNING, L.K. *see* CONNELL, T.R.
BISHOP, B.A. *see* GRAFIUS, E.J.
BISHT, V.S. and P.S. BAINS. *Helminthosporium solani*: Soil survival, fungicide sensitivity and field reactions of potato cultivars, 662 (abst.).
BOHL, W., R. ASHLEY, G. HARDING and B. SHAFII. Potato shrinkage storage survey of Idaho cellars, 662 (abst.).
BOSMA, S.M. *see* WESTERMANN, D.T.
BOURGOIN, T. *see* MEHDIZADEGAN, F.
BOWMAN, T. *see* CARLSON, H.L.
BRANDT, T.L. and G.E. KLEINKOPF. The effect of four seed handling techniques on seed piece performance and yield, 663 (abst.).
BRANDT, T.L. *see* LEWIS, M.D.
BREMER, K. *see* EL-AMIN, S.M.
BROOK, R.C. *see* FICK, R.J.
BROWN, C.R. Use of *Bombus Occidentalis* to pollinate potato, 663 (abst.).
BROWN, C.R. *see* CORSINI, D.L.
BROWN, C.R. *see* NIELSEN-PREISS, S.M.
BROWN, C.R., C.P. YANG, H. MOJTAHEDI and G.S. SANTO. Mapping of resistance to Columbia root-knot nematode to a *Solanum bulbocastanum* chromosome, 664 (abst.).
BRUST, G.E. The interaction of straw-mulch, natural enemies, and BT on Colorado potato beetle populations and damage in potatoes, 664 (abst.).
BUSHWAY, A.A. *see* REEVES, A.F.

BYRNES, J. *see* GROZA, H.
CACACE, J.E., MA.A. HUARTE and M.C. MONTI. Evaluation of potato cooking quality in Argentina, 145.
CAMPBELL, W.L. Varietal resistance to potato scab in Alaska, 665 (abst.).
CANTELO, W.W., W.J.E. POTTS and L.L. SANFORD. Comparing potato plant resistance to the Colorado potato beetle, 665 (abst.).
CARLOS, M.B., Ch. NTONIFOR, D. NJUALEM and T. GASS. Seedling tubers for potato production in the Highlands of Cameroon, 665 (abst.).
CARLSON, H.L., D. KIRBY, A.R. WEINHOLD and T. BOWMAN. Control of white mold with fungicides, 666 (abst.).
CELETTI, M.J. *see* JOHNSON, H.W.
CARPUTO, D., A. BARONE, D. CONSOLI and L. FRUSCIANTE. Use of seedling tubers from tips in southern Italy, 29.
CHAUVIN, R.L. *see* BIEVER, K.D.
CLEAR, R.M. *see* KAWCHUCK, L.M.
CLOUGH, G. *see* McMORRAN, J.
COLLINS, W.W. *see* VALLEJO, R.L.
COLTMAN, R.R. Relationships between years of field propagation and productivity of seed potatoes, 666 (abst.).
CONNELL, T.R. *see* BINNING, L.K.
CONELL, T.R., W.R. STEVENSON, L.K. BINNING, J.A. WYMAN, D. CURWEN, K.A. KELLING, D.J. HEIDER and R. KLEMME. Economics of potato production systems in Wisconsin, 667 (abst.).
CONNELL, T.R., W.R. STEVENSON, L.K. BINNING, J.A. WYMAN, D. CURWEN, K.A. KELLING, P. KAARAKKA, G. RICE and R. SCHMIDT. Integrated crop management computer software for vegetable produciton systems involving potatoes, 667 (abst.).
CONSOLI, D. *see* CARPUTO, D.
CORSINI, D. *see* BELKNAP, W.R.
CORSINI, D. *see* HALBERT, S.
CORSINI, D.L., J.J. PAVEK, M.W. MARTIN and C.R. BROWN. Potato germplasm with combined resistance to leafroll virus and viruses X and Y, 377.
CROWE, F.J. *see* FEIBERT, E.B.G.
CROWE, F.J. *see* JAMES, S.R.
CUNNINGHAM, C.E. *see* REEVES, A.F.
CURWEN, D. *see* BINNING, L.K.
CURWEN, D. *see* CONNELL, T.R.
DAVIS, J.R., L.H. SORENSEN and A.T. SCHNEIDER. Rhizoctonia control of Russet Burbank with metam sodium, 668 (abst.).
DAVIS, J.R., J.C. STARK, L.H. SORENSEN and A.T. SCHNEIDER. Interactive effects of nitrogen and phosphorus and verticillium wilt of Russet Burbank potato, 467.
DAVIS, R. *see* GROZA, H.
DAVIS, A.A. *see* REEVES, A.F.
DEAHL, K.L. and S.P. DeMUTH. A^2 mating type of *Phytopthora infestans:* Increased frequency of occurrence, 669 (abst.).
DEAHL, K.L. *see* SANFORD, L.L.
DEAN, B.B. *see* BAJEMA, R.
DEAN, B.B. *see* McNABNAY, M.
DeBOER, S.H. *see* LI, X.
DeBOER, S.H. *see* WARD, L.J.
DeKLERK, A. and S. La G. ENGELBRECHT. Chemical control of common scab in potatoes in South Africa, 669 (abst.).
DE LA MORENA, I., A. GUILLEN and F.L. GARCIA DEL MORAL. Yield development in potatoes as influenced by cultivar and the timing on level of nitrogen fertilization, 165.

DEMO, P. *see* MARTIN, C.
DeMUTH, S.P. *see* DEAHL, K.L.
DESJARDING, R., I. GALLIGHER and D. LOBB. Crop rotation: Maintaining the competitiveness of potato producers, 669 (abst.).
DiFONZO, C.D., D.W. RAGSDALE and E.B. RADCLIFFE. Use of crop borders to reduce potato virus Y incidence in Red River Valley seed potato, 669 (abst.).
DOUCHES, D.S. and R. FREYRE. Identification of genetic factors influencing chip color in diploid potato (*Solanum spp.*), 581.
DOUCHES, D.S. *see* MAAS, D.L.
DRENNAN, J.L. *see* WESTRA, A.A.G.
EBERLEIN, C.V., M.J. GUTTIERI and W.R. BELKNAP. Performance of transgenic potato plants expressing the BXN gene, 670 (abst.).
ELDREDGE, E.P. *see* SHOCK, C.C.
ELLIS, P.J. *see* McDONALD, J.G.
EL-AMIN, S.M., J.P.T. VALKONEN, K. BREMER and E. PEHU. Elimination of viruses and hypersensitivity of potato virus (PVY^{O}) in an important Sudanese potato stock (Zalinge), 267.
ENGELBRECHT, S. La G. *see* DeKLERK, A.
ERREBHI, M., C.J. ROSEN, F. LAUER and M. MARTIN. Evaluation of wild potato germplasm for nitrogen use efficiency, 670 (abst.).
ESCALANTE, B. and A.R. LANGILLE. Effects of hormone concentration on potato rhizome initiation and development *in vitro*, 671 (abst.).
FARNSWORTH, B. *see* BALBYSHEV, N.F.
FARNSWORTH, B. *see* JOHANSEN, R.H.
FEIBERT, E.B.G., S.R. JAMES, K.A. RYKBOST, A.R. MITCHELL, C.C. SHOCK and F.J. CROWE. Effect of methanol on potato production at three Oregon locations, 671 (abst.).
FEIBERT, E.B.G. *see* SHOCK, C.C.
FELDMAN, J. *see* STEWART, J.
FENWICK, A. *see* ISHIMARU, C.A.
FERNANDO, S. *see* McMORRAN, J.
FICK, R.J. and R.C. BROOK. Experiments on the long term storage of Snowden potatoes, 672 (abst.).
FILLATTI, J. *see* GROZA, H.
FLANDERS, E.B. *see* RADCLIFFE, E.B.
FLECK, D.L. *see* GOTH, R.W.
FOGELMAN, E. *see* LEVY, D.
FONDONG, V. *see* MARTIN, C.
FRANCA, F.H. and W.M. TINGEY. *Solanum berthaultii* (Hawkes) affects the digestive system, fat body and ovaries of the Colorado potato beetle, 405.
FRAZIER, K.M.B. *see* GOTH, R.W.
FRAZIER, M.J. *see* LEWIS, M.D.
FRAZIER, M.J. *see* SHETTY, K.K.
FRAZIER, M.J., K.K. SHETTY, G.E. KLEINKOPF and P. NOLTE. Assessment of fungicide combinations as seed treatments for controlling silver scurf (*Helminthosporium solani*) during tuber growth, at harvest and after storage, 672 (abst.).
FREYRE, R. *see* DOUCHES, D.S.
FREYRE, R. *see* WATANABE, K.
FRUSCIANTE, L. *see* CARPUTO, D.
GALLIGHER, I. *see* DESJARDING, R.
GALLO, L.G., S.A. SLACK and R. LORIA. An approach to field screening potato genotypes for potato leafroll virus resistance, 115.
GARCIA DEL MORAL, F.L. *see* DE LA MORENA, I.
GARCIA, G. *see* LOZOYA, H.
GARCIA, W. *see* SPOONER, D.M.

GASS, T. *see* CARLOS, M.B.
GASS, T. *see* MARTIN, C.
GEBHAROT, C. RFLP mapping in potato of qualitative and quantitative genetic loci conferring resistance to potato pathogens, 339.
GICHOHI, E.G. *see* PRITCHARD, M.K.
GLYNN, M.T., P.H. ORR and D.A. PRESTON. Correlating harvest time tuber damage and response: I. drop tests, 672 (abst.).
GOTH, R.W. *see* HAYNES, K.G.
GOTH, R.W., K.G. HAYNES, K.M.B. FRAZIER and D.L. FLECK. Evaluation of potato cultivars for resistance to *Erwinia* under high and low temperatures, 673 (abst.).
GOTH, R.W., K.G. HAYNES and D.R. WILSON. Evaluation of potato breeding selections for resistance to late blight, 673 (abst.).
GOTH, R.W., K.G. HAYNES and D.R. WILSON. Verticillium wilt resistant germplasm: Release of Russet Clone B0169-56, 795.
GOTH, R.W. *see* WEINGARTNER, D.P.
GRAFIUS, E.J. and B.A. BISHOP. Design of crop rotation systems for management of Colorado potato beetle, 673 (abst.).
GRAFIUS, E.J. *see* WHALON, M.F.
GROZA, H., J. FILLATTI, J. BYRNES and R. DAVIS. Optimization of PLRV inoculation procedure, 674 (abst.).
GROZA, H. *see* LOVE, S.L.
GUBB, I. and J. MOORBY. The effects of controlled atmosphere storage on the sprouting of potato tubers, 674 (abst.).
GUDMESTAD, N.C. *see* JOHANSEN, R.H.
GUILLEN, A. *see* DE LA MORENA, I.
GUTTIERI, M.J. *see* EBERLEIN, C.V.
HALBERT, S., D. CORSINI and L. SANDVOL. Transmission of potato virus Y by common aphids in Idaho, 675 (abst.).
HALSETH, D.E., J.B. SIECZKA, P.L. MINOTTI and S. McLASKEY. Nitrogen recommendation constraints when using fresh sap nitrate measurements, 675 (abst.).
HANE, D. *see* McMORRAN, J.
HANNAN, R., B. HUAI-LYE and T.B. JOHNSON. Development of recombinant *Baccilus thuringiensis* for control of Colorado potato beetle, 676 (abst.).
HANSON, L.E. and R. LORIA. Thiabendazole resistance in *Fusarium* spp. associated with fusarium dry rot of potato in the Northeastern United States, 676 (abst.).
HANSON, D.J. *see* NOLTE, P.
HARDING, G. *see* BOHL, W.
HAWKES, J.G. *see* RADCLIFFE, E.B.
HAYNES, K.G. *see* GOTH, R.W.
HAYNES, K.G. *see* HENNINGER, M.R.
HAYNES, K.G., R.W. GOTH and D.R. WILSON. Genotypic stability of potato clones for field resistance to verticillium wilt in Maine, 676 (abst.).
HAYNES, K.G. *see* WEINGARTNER, D.P.
HEIDER, D.J. *see* BINNING, L.K.
HEIDER, D.J. *see* CONNELL, T.R.
HELGESON, J.P. *see* McGRATH, J.M.
HELGESON, J.P., R.V. JAMES and W.R. STEVENSON. Analysis of early blight resistance from somatic hybrids, 677 (abst.).
HENNINGER, M.R., K.G. HAYNES and S.B. STERRETT. Genetic components of variance for internal heat necrosis in clonally propagated potatoes, 677 (abst.).
HENNINGER, H.R. *see* PATERSON, J.W.
HILLER, L.K. *see* STOCKLE, C.O.
HOLLEY, J.D. *see* KAWCHUCK, L.M.
HOLLEY, J. *see* LYNCH, D.R.

HOLM, D.G. Russet Norkotah clonal selection studies, 678 (abst.).
HOLM, E.T., P.H. ORR and R.H. JOHANSEN. Sensory evaluation as a tool in breeding for french fries and flakes, 1.
HOSAKA, K., M. MORI and K. OGAWA. Genetic relationships of Japanese potato cultivars assessed by R.A.P.D. analysis, 535.
HUAI-LYE, B. *see* HANNAN, R.
HUARTE, M.A. *see* CACACE, J.E.
HUGHES, B. The effects of cutting density on the production of minitubers in trays, 678 (abst.).
HURST, R.I. *see* JAMES, D.W.
HURST, R.L. *see* WESTERMANN, D.T.
HYDE, G.M. *see* BAJEMA, R.
HYDE, G.M. *see* McNABNAY, M.
INGHAM, R. *see* MOJTAHEDI, H.
INGHAM, R. *see* RYKBOST, K.
INGLIS, D.A. and D.A. JOHNSON. Evaluation of potato cultivars grown in the Pacific Northwest for resistance to late blight, 679 (abst.).
ISHIMARU, C.A., N.L.V. LAPITAN, A. VANBUREN, A. FENWICK and K. PEDAS. Identification of parents suitable for molecular mapping of immunity and resistance genes in solanum species, 517.
ITZHAK, Y. *see* LEVY, D.
IWANAGA, M. *see* WATANABE, K.
JAMES, R.V. *see* HELGESON, J.P.
JAMES, D.W., R.I. HURST, D.T. WESTERMANN and T.A. TINDALL. Nitrogen and potassium fertilization of potatoes: Evaluating nutrient element interactions in petioles with response surfaces, 249.
JAMES, D.W. *see* WESTERMANN, D.T.
JAMES, R.V. *see* STEVENSON, W.R.
JAMES, S.R., F.J. CROWE and A.R. MITCHELL. Methanol effects on potato yield, quality and water use, 679 (abst.).
JAMES, S.R. *see* FEIBERT, E.B.G.
JANSKY, S.H. Potato breeding in Russia—August 1993, 749.
JANSKY, S.H. *see* VAUGHN, S.F.
JOHANSEN, R.H. *see* BALBYSHEV, N.F.
JOHANSEN, R.H. *see* HOLM, E.T.
JOHANSEN, R.H., B. FARNSWORTH, G.A. SECOR, N.C. GUDMESTAD, A. THOMPSON-JOHNS and E.T. HOLM. Goldrush: A new high quality Russeted-skinned potato cultivar, 809
JOHNSON, D.A. *see* INGLIS, D.A.
JOHNSON, H.W., M.J. CELETTI, J. KIMPINSKI and H.W. PLATT. Fungal pathogens and *Pratylenchus penetrans* associated with preceding crops of clover, winter wheat, AND annual rye grass and their influence on succeeding potato crops on Prince Edward Island, 797
JOHNSON, S.B. Thiabendazole resistance in fusarium isolates, 679 (abst.).
JONES, W.B. *see* NOLTE, P.
JONNSON, T.B. *see* HANNAN, R.
KAARAKKA, P. *see* CONNELL, T.R.
KAMINSKI, J. *see* WEISI, R.
KAWCHUK, L.M., J.D. HOLLEY, D.R. LYNCH and R.M. CLEAR. Resistance to thiabendazole and thiophonate-methyl in Canadian isolates for *Fusarium sambucinum* and *Helminthosporium solani*, 185.
KAWCHUK, L.M. *see* LYNCH, D.R.
KAY, M.A. *see* WESTERMANN, D.T.
KELLING, K.A. *see* BINNING, L.K.

KELLING, K.A. *see* CONNELL, T.R.
KELMAN, A. *see* LOJKOWSKA, E.
KIMPINSKI, J. *see* JOHNSON, H.W.
KINKAID, D.C. *see* TROUT, T.J.
KIRBY, D. *see* CARLSON, H.L.
KLEINKOPF, G.E. *see* BRANDT, T.L.
KLEINKOPF, G.E. *see* FRAZIER, M.J.
KLEINKOPF, G.E. *see* LEWIS, M.D.
KLEINKOPF, G.E. *see* SHETTY, K.K.
KLEINKOPF, G.E. *see* THORNTON, M.K.
KLEMME, R. *see* CONNELL, T.R.
KNOWLES, N.R. *see* McARTHUR, D.A.J.
KRISTJANSSON, G.T. *see* McDONALD, J.G.
KOBAYASHI, R. *see* SANFORD, L.L.
KOBAYASHI, R.S., S.L. SINDEN and L.L. SANFORD. Effect of ploidy on foliar glycoalkaloid concentration and Colorado potato beetle resistance in *Solanum chacoense*, 680 (abst.).
LANGILLE, A.R. *see* ESCALANTE, B.
LAPITAN, N.L.V. *see* ISHIMARU, C.A.
LAUER, F. *see* ERREBHI, M.
LAUER, F. *see* LONGTINE, C.
LAWRENCE, D.F., S.A. SLACK and R.L. PLAISTED. Russet Bake King: A uniform russeted sprout of Bake King, 127.
LEEVER, G., W.A. TRANK, G. SHAVER, J.C. MILLER, JR. and A.D. PAVLISTA. Norgold Russet, Superior, and Red La Soda strains selected from potato cultivar improvements in Nebraska, 133.
LEVINE, A. *see* LEVY, D.
LEVY, D., E. FOGLEMAN, A. LEVINE and Y. ITZHAK. Tuberization *in vitro* and dormancy of potato (*Solanum tuberosum*) microtubers, 680 (abst.).
LEVY, D. and R.E. VEILLEUX. Screen for heat tolerance among complex 4x-2x potato hybrids in Israel, 681 (abst.).
LEWIS, M.D., G. KLEINKOPF, J. BARTA, T. BRANDT and M.J. FRAZIER. DMN and DIPN as sprout inhibitors on stored Russet Burbank potatoes, 681 (abst.).
LEWIS, M.D. *see* SHOCK, C.C.
LEWIS, M.D. *see* THORNTON, M.K.
LI, X., L.J. WARD and S.H. DeBOER. Selection of specific PCR primers for detection of *Clavibacter michiganensis* subsp. *sepedonicus*, 682 (abst.).
LOBB, D. *see* DESJARDING, R.
LOJKOWSKA, E. and A. KELMAN. Comparison of the effectivenes of different methods of screening for bacterial soft rot resistance of potato tubers, 99.
LOMMEL, S.A. *see* VALLEJO, R.L.
LONGTINE, C., E. RADCLIFFE, F. LAUER and D. RAGSDALE. Use of exotic *Solanum* species for control of green peach aphid, potato leafroll virus, and potato virus Y, 684 (abst.).
LORENZEN, J.H. *see* BALBYSHEV, N.F.
LORIA, R. *see* GALLO, L.G.
LORIA, R. *see* HANSON, L.E.
LORIA, R. *see* MERIDA, C.L.
LORIA, R. *see* URIBE, E.
LORENZEN, J. *see* SATISH, R.
LOVE, S.L. Ecological risk of growing transgenic potatoes in the United States and Canada, 647.
LOVE, S.L., H. GROZA, A. THOMPSON-JOHNS and B.K. WERNER. Comparison of TPS hybrids with clonally propagated cultivars, 683 (abst.).
LOVE, S.L. *see* THOMPSON-JOHNS, A.

LOVE, S.L., A. THOMPSON-JOHNS, B.K. WERNER and T.P. BAKER. REM 134: A mutant of Russet Burbank susceptible to blackspot bruise, 411.
LOVE, S.L., T.B. STONE and J.J. PAVEK. Risk of transgene introgression from potatoes into wild species endemic to the U.S. and Canada, 683 (abst.).
LOVE, S.L. *see* WERNER, B.K.
LOZOYA, H., F. ABELLO and G. GARCIA. Electrotherapy and shoot tip culture eliminate PVX in potatoes, 684 (abst.).
LULAI, E.C. Identification of cell types responsible for development of tuber skin-set during periderm maturation, 684 (abst.).
LULAI E.C. and P.H. ORR. Techniques for detecting and measuring developmental and maturational changes in tuber native periderm, 489.
LYNCH, D.R. *see* KAWCHUK, L.M.
LYNCH, D.R., C. SCHAUPMEYER, L.M. KAWCHUK, T.R. TARN, B. REX, J. HOLLEY, D. WATERER, J. PANFORD and M.K. PRITCHARD. A.C. PTARMIGAN: An early maturing potato cultivar with good chipping and fresh market quality, 387.
McARTHUR, D.A.J. and H.R. KNOWLES. Responses of potato to P nutrition and VA-mycorrhizal fungi, 686 (abst.).
McDONALD, J.G., G.T. KRISTJANSSON, R.P. SINGH, P.J. ELLIS and W.B. McNAB. Consecutive ELISA screening with monoclonal antibodies to detect potato virus Y, 175.
McGRATH, J.M., S.M. WIELGOS and J.P. HELGESON. Recombination and introgression of *Solanum brevidens* DNA in progeny of a somatic hybrid with potato, 686 (abst.).
McLASKEY, S. *see* HALSETH, D.E.
McMORRAN, J., A. MOSLEY, G. CLOUGH, D. HANE and S. FERNANDO. Effects of potato cropping practices on nitrate leaching in the Columbia Basin, 687 (abst.).
McNAB, W.B. *see* McDONALD, J.G.
McNABNAY, M., B.B. DEAN and G.M. HYDE. Study of blackspot bruise of potato tubers impacted to physically damaging levels, 687 (abst.).
MAAS, D.L. and D.S. DOUCHES. Comparison of FDR- and SPR-derived 4x progeny, 685 (abst.).
MADDEN, L.V. *see* WHEELER, T.A.
MANZER, F.E. *see* REEVES, A.F.
MARANGONI, A.G. *see* O'DONOGHUE, E.
MAREDIA, K. *see* WHALON, M.E.
MARTIN, M.W. *see* CORSINI, D.L.
MARTIN, C., P. DEMO, T. GASS and V. FONDONG. A system for basic seed production in Cameroon, 685 (abst.).
MARTIN, M. *see* ERREBHI, M.
MARTIN, R.R. Genetic engineering of potatoes, 347.
MATTESON, N.A. *see* STOLTZ, R.L.
MEHDIZADEGAN, F. and T. BOURGOIN. Relationships between mosaic symptom expression in field and infection by PVM, PVS, PVX, and PVY in variety Shepody, 687 (abst.).
MELDRUM, J. *see* WEINGARTNER, D.P.
MERIDA, C.L. and R. LORIA. Survival of *Helminthosporium solani* in soil and *in vitro* colonization of senescent plant tissue, 591.
MIKITZEL, L.J. and E.J. SORENSEN. Agronomic and culinary qualities of selected specialty potato cultivars, 688 (abst.).
MILLER, JR., J.C. *see* LEEVER, G.
MILLER, JR., J.C. *see* ZAPATA, C.J.
MINOTTI, P.L. *see* HALSETH, D.E.
MITCHELL, A.R. *see* FEIBERT, E.B.G.
MITCHELL, A.R. *see* JAMES, S.R.
MOJTAHEDI, H. *see* BROWN, C.R.
MOJTAHEDI, H., R. INGHAM, G. SANTO and J. WILSON. Management of *Meloidogyne chitwoodi* on potato with crop rotation, green manure amendment, and Ethoprop, 688 (abst.).

MONTI, M.C. *see* CACACE, J.E.
MOORBY, J. *see* GUBB, I.
MORI, M. *see* HOSAKA, K.
MOSLEY, A. *see* McMORRAN, J.
MUNETA, P. Enzymatic and nonenzymatic discoloration in potatoes, 689 (abst.).
NICKERSON, R.J. *see* REEVES, A.F.
NIELSEN-PREISS, S.M., G.G. PRESTING, D.P. SMITH and C.R. BROWN. Inheritance of transgenic resistance obtained through a vector control plasmid, 689 (abst.).
NILMALGODA, S. and S.J. PELOQUIN. Meiosis in male sterile haploids of male fertile tetraploids, 689 (abst.).
NJUALEM, D. *see* CARLOS, M.B.
NOLTE, L.L. *see* NOLTE, P.
NOLTE, P. *see* FRAZIER., M.J.
NOLTE, P., W.B. JONES and L.L. NOLTE. The effect of seed treatments on the rate of suberin and wound periderm development in cut seed potatoes, 689 (abst.).
NOLTE, P., W.B. JONES, S.L. PEEBLES and D.J. HANSON. A Benzimidazolel resistance management program for Fusarium sambucium in Idaho, 689 (abst.).
NOLTE, P. *see* SHETTY, K.K.
NTONIFOR, Ch. *see* CARLOS, M.B.
O'DONOGHUE, E., A.G. MARANGONI and R.Y. YADA. Determination of glycoalkaloids in potatoes using ELISA, 691 (abst.).
O'DONOGHUE, E., A.G. MARANGONI and R.Y. YADA. A physiological index for the prediction of chip quality after long-term storage of fresh tubers, 691 (abst.).
OGAWA, K. *see* HOSAKA, K.
OPENA, G.B., L. ZHANG and G.A. PORTER. Soil amendment and crop rotation effects on growth and yield of Superior potatoes, 692 (abst.).
ORR, P.H. *see* GLYNN, M.T.
ORR, P.H. *see* HOLM, E.T.
ORR, P.H. *see* LULAI, E.C.
ORILLO, M. *see* VALKONEN, J.P.T.
ORILLO, M. *see* WATANABE, K.
ORTIZ, R. *see* WATANABE, K.
PALLAIS, N. Action of storage temperature on germination vigor of sexual potato seeds, 692 (abst.).
PANFORD, J. *see* LYNCH, D.R.
PATERSON, J.W. and H.R. HENNINGER. Potato fertilization studies in New Jersey, 692 (abst.).
PAVEK, J.J. *see* BELKNAP, W.R.
PAVEK, J.J. *see* CORSINI, D.L.
PAVEK, J.J. *see* LOVE, S.L.
PAVLISTA, A.D. Effects of Folicate on the yield and quality of Atlantic potatoes, 693 (abst.).
PAVLISTA, A.D. Effects of substituted nitroguanidine seed treatments on the potato variety Superior, 395.
PAVLISTA, A.D. *see* LEEVER, G.
PAZ, M.M. *see* VEILLEUX, R.E.
PEDAS, K. *see* ISHIMARU, C.A.
PEEBLES, S.L. *see* NOLTE, P.
PEHU, E. *see* EL-AMIN, S.M.
PELOQUIN, S.J. *see* NILMALGODA, S.
PELOQUIN, S.J. *see* SERGUEN, F.C.
PELOQUIN, S.J. *see* THILL, C.A.
PEREZ, S. *see* WATANABE, K.
PINEDA, O. *see* YENCHO, G.C.
PLAISTED, R.L. Potato genetics valuable resource book for breeders and others, 553.

PLAISTED, R.L. *see* LAWRENCE, D.F.
PLAISTED, R.L. *see* VALKONEN, J.P.T.
PLAISTED, R.L. *see* YENCHO, G.C.
PLATT, H.W. *see* JOHNSON, H.W.
PLATT, H.W. Potato late blight management with fungicides, 693 (abst.).
PLATT, H.W. Effective use of Metalaxyl for potato late blight control, 694 (abst.).
PLHAK, L. and P. SPORNS. Development and production of monoclonal antibodies for the measurement of solanidine potato glycoalkaloids, 297.
PLISSEY, E.S. *see* REEVES, A.F.
PORTER, G.A. *see* OPENA, G.B.
PORTER, G.A. *see* REEVES, A.F.
PORTER, G.A. and J.A. SISSON. Cull potato compost application and its effects on soil properties, nutrient uptake, and tuber yields, 694 (abst.).
POTTS, W.J.E. *see* CANTELO, W.W.
PRESTING, G.G. *see* NIELSEN-PREISS, S.M.
PRESTON, D.A. *see* GLYNN, M.T.
PRITCHARD, M.K. and L.R. ADAM. Relationships between fry color and sugar concentration in stored Russet Burbank and Shepody potatoes, 59.
PRITCHARD, M.K. and E.G. GICHOHI. Maleic hydrazide effects on sugars during storage of the potato cultivars Shepody and Russet Burbank, 695 (abst.).
PRITCHARD, M.K. *see* LYNCH, D.R.
PRITCHARD, M.K. *see* SCANLON, M.G.
PUTMAN, M.L. and A.B. SINDERMANN. Eradication of potato wart disease from Maryland, 743.
RADCLIFFE, E.B. *see* DiFONZO, C.D.
RADCLIFFE, E.B., K.L. FLANDERS and J.G. HAWKES. Geographic occurrence of insect resistances in the potatoes, 695 (abst.).
RAGSDALE, D.W. *see* DiFONZO, C.D.
RADCLIFFE, E. *see* LONGTINE, C.
RADCLIFFE, E.B. *see* SURANYI, R.A.
RAHARDJA, V. *see* WHALON, M.E.
REEVES, A.F., A.A. BUSHWAY and R. WORK. Purple streaks in potato tuber flesh, 696 (abst.).
REEVES, A.F., G.A. PORTER, C.E. CUNNINGHAM, R.J. NICKERSON, F.E. MANZER, T.M. WORK, A.A. DAVIS and E.S. PLISSEY. Prestile: A new round white potato variety, 89.
REEVES, A.F., G.A. PORTER, F.E. MANZER, T.M. WORK, A.A. DAVIS and E.S. PLISSEY. Mainechip: A new chipping potato variety for cool storage processing, 237.
REEVES, A.F. *see* WORK, T.M.
REEVES, A.F. *see* WORK, R.W.
REUST, W. The aging rate of a potato cultivar determines the yield, 696 (abst.).
REX, B. *see* LYNCH, D.R.
RICE, G. *see* CONNELL, T.R.
RIEDEL, R.M. *see* WHEELER, T.A.
RIVERA-PENA, A. Genebank of potato in Mexico with resistance to late blight, 696 (abst.).
ROCKHOLD, D.R. *see* BELKNAP, W.R.
ROLLER, R. *see* SCANLON, M.G.
ROSEN, C.J. *see* ERREBHI, M.
ROWE, R.C. *see* WHEELER, T.A.
RYKBOST, K.A. *see* FEIBERT, E.B.G.
RYKBOST, K. and R. INGHAM. Timing and severity of corky ringspot infections of four potato cultivars, 697 (abst.).
SANDVOL, L. *see* HALBERT, S.
SANDVOL, L. *see* STOLTZ, R.L.
SANFORD, L.L. *see* CANTELO, W.W.

SANFORD, L.L., K.L. DEAHL and S.L. SINDEN. Glycoalkaloid content in foliage of hybrid backcross populations from a *Solanum tuberosum* X *S. chacoense* cross, 225.
SANFORD, L.L., K.L. DEAHL, S.L. SINDEN and R. KOBAYASHI. Glycoalkaloid content of tubers of hybrid and backcross populations from a *Solanum tuberosum* X *S. chacoense* cross, 697 (abst.).
SANFORD, LL. *see* KOBAYSHI, R.S.
SANTO, G.S. *see* BROWN, C.R.
SANTO, G. *see* MOJTAHEDI, H.
SATISH, R. and J. LORENZEN. Variability in phosphate and amylose in starch from potato species, 698 (abst.).
SAUNDERS, L.D. *see* SHOCK, C.C.
SCANLON, M.G., R. ROLLER and M.K. PRITCHARD. Computerized video image analysis to quantify color of potato chips, 717.
SCHIAVONE, R.D. *see* VALLEJO, R.L.
SCHMIDT, R. *see* CONNELL, T.R.
SCHNEIDER, T. *see* DAVIS, J.R.
SCHAUPMEYER, C. *see* LYNCH, D.R.
SECOR, G.A. *see* JOHANSEN, R.H.
SERGUEN, F.C. and S.J. PELOQUIN. Evaluation of tuber traits in wild species through *tuberosum* haploid species hybrids, 698 (abst.).
SHAFIL, B. *see* BOHL, W.
SHAFIL, B. *see* WERNER, B.K.
SHAVER, G. *see* LEEVER, G.
SHEN, L.Y. and R.E. VEILLEUX. Study of extended anther culture, 699 (abst.).
SHETTY, K.K. *see* FRAZIER, M.J.
SHETTY, K.K., M.J. FRAZIER, G.E. KLEINKOPF and P. NOLTE. The infection, spread, and survival of silver scurf (*Helminthosporium solani*) in potato storage, 699 (abst.).
SHOCK, C.C. *see* FEIBERT, E.B.G.
SHOCK, C.C., E.B.G. FEIBERT and L.D. SAUNDERS. Potato response to deficit irrigation, 700 (abst.).
SHOCK, C.C., E.B.G. FEIBERT and L.D. SAUNDERS. Simulated hail timing influences on tuber yield and quality, 700 (abst.).
SHOCK, C.C., T.D. STIEBER, J.C. ZALEWSKI, E.P. ELDREDGE and M.D. LEWIS. Potato tuber stem-end fry color determination, 77.
SIECZKA, J.B. *see* HALSETH, D.E.
SINDEN, S.L. *see* KOBAYASHI, R.S.
SINDEN, S.L. *see* SANFORD, L.L.
SINDERMANN, A.B. *see* PUTMAN, M.L.
SINGH, R.P. *see* McDONALD, J.G.
SINGH, R.P. *see* SINGH, M.
SINGH, M. and R.P. SINGH. *Solanum microdontum* (PI558098): A diagnostic host plant for potato virus A, 547.
SINGH, M., R.P. SINGH and T.H. SOMERVILLE. Evaluation of tuber-bearing *Solanum* species for symptomology as diagnostic hosts, and sources of immunity to potato virus Y necrotic strain (PVY^N), 567.
SISSON, J.A. *see* PORTER, G.A.
SLACK, S.A. *see* GALLO, L.G.
SLACK, S.A. *see* LAWRENCE, D.F.
SLACK, S.A. *see* VALKONEN, J.P.T.
SLACK, S.A. *see* WESTA, A.A.G.
SMILOWITZ, Z. *see* WEISZ, R.
SMITH, O.P. *see* NIELSEN-PREISS, S.M.
SMITH, R.H. *see* ZAPATA, C.

SNYDER, G.W. *see* BELKNAP, W.R.
SOMERVILLE, T.H. *see* SINGH, M.
SORENSEN, L.H. *see* DAVIS, J.R.
SORENSEN, E.J. *see* MIKITZEL, L.J.
SPOONER, D.M. and J.B. BAMBERG. Potato genetic resources: Sources of resistance and systematics, 325.
SPOONER, D.M., R.C. van den BERG and J.B. BAMBERG. Examination of series and species boundaries of *Solanum* series *Demissa* and potentially related species of series *Acaulia* and series *tuberosa* (Solonaceae: Sect. petota), 701 (abst.).
SPOONER, D.M., R.G. van den BERG, M.L. GARCIA and W. GARCIA. Bolivia 1993/1994 potato germplasm collecting expeditions: New germplasm resources, 700 (abst.).
SPORNS, P. *see* ABELL, D.C.
SPORNS, P. *see* PLHAK, L.
STARK, J.C. *see* DAVIS, J.R.
STERRETT, S.B. *see* HENNINGER, M.R.
STEVENSON, W.R. The potential impact of field resistance to early blight on fungicide inputs, 317.
STEVENSON, W.R. *see* BINNING, L.K.
STEVENSON, W.R. *see* CONNELL, T.R.
STEVENSON, W.R. *see* HELGESON, J.P.
STEVENSON, W.R. and R.V. JAMES. Initial development and field testing of an expert system to customize recommendations to minimize potato seedpiece decay caused by *Erwinia* and *Fusarium* spp., 701 (abst.).
STEWART, J. and J. FELDMAN. The potato flea beetle *Epitrix cucumeris* (Harx) (*Coleoptera chrysomelidae*), 702 (abst.).
STIEBER, T.D. *see* SHOCK, C.C.
STOCKLE, C.O. and L.K. HILLER. Evaluation of on-farm irrigation scheduling methods for potatoes, 155.
STOLTZ, R.L., N.A. MATTESON and L. SANDVOL. A summary of Colorado potato beetle, green peach aphid, and wireworm control with Imidacloprid in Idaho, 702 (abst.).
STOLTZ, R.L., N.A. MATTESON and L. SANDVOL. Colorado potato beetle control with new or non-traditional insecticides, 703 (abst.).
STONE, T.B. *see* LOVE, S.L.
SURANYI, R.A. and E.B. RADCLIFFE. Strategies for deployment of *Bacillus Thuringiensis* subsp. *Tenebrionis* α-Endotoaxin in control of Colorado potato beetle, 703 (abst.).
TANINO, K.K. *see* BANDARA, M.S.
TANKSEY, S. *see* YENCHO, G.C.
TARN, T.R. *see* LYNCH, D.R.
THILL, C.A. and S.J. PELOQUIN. Inheritance of potato chip color at the 24-chromosome level, 629.
THILL, C.A. and S.J. PELOQUIN. Identification of clones that chip directly from 4 C storage after selection from single hills, 704 (abst.).
THOMPSON-JOHNS, A. *see* JOHANSEN, R.H.
THOMPSON-JOHNS, A., S.L. LOVE and M.K. THORNTON. Inheritance of the sugar-end disorder in potato, 704 (abst.).
THOMPSON-JOHNS, A. *see* WERNER, B.K.
THORNTON, M.K., M.D. LEWIS, J.L. BARTA and G.E. KLEINKOPF. Effect of nitrogen management on Russet Burbank tuber dormancy and response to CIPC, 705 (abst.).
THORNTON, M.K. *see* THOMPSON-JOHNS, A.
TIMM, G.H., H. TIMM and M. WEAVER. Crust formation, suberization and wound healing response to fungicide powder formulations applied to freshly cut seed potato pieces, 705 (abst.).
TIMM, H. *see* TIMM, G.H.

TINDALL, T.A. *see* JAMES, D.W.
TINDALL, T.A. *see* WESTERMANN, D.T.
TINGEY, W.M. *see* FRANCA, F.H.
TINGEY, W.M. *see* YENCHO, G.C.
TRANK, W.A. *see* LEEVER, G.
TROUT, T.J., D.C. KINCAID and D.T. WESTERMANN. Comparison of Russet Burbank yield and quality under furrow and sprinkler irrigation, 15.
TURKA, I. Relationships between population density of tarnished plant bugs, Lygus spp. and concentration of free amino-acids, carbohydrates and glycoalkaloids in the potato leaves, 706 (abst.).
VALKONEN, J.P.T. *see* EL-AMIN, S.M.
VALKONEN, J.P.T., S.A. SLACK and R.L. PLAISTED. Use of the virus strain group concept to characterize the resistance to PVX and PVY^{O} in the potato cv. Allegany, 507.
VALKONEN, J.P.T., S.A. SLACK and R.L. PLAISTED. Use of the virus strain group concept to characterize resistance to potato viruses Y, X and Z with evidence for two PVA strain groups, 706 (abst.).
VALKONEN, J.P.T., S.A. SLACK, M. ORILLO and K. WATANABE. Testing virus resistance in sexual hybrids between a diploid potato breeding line and non-tuber bearing *Solanum brevidens*, 706 (abst.).
VALKONEN, J.P.T., S.A. SLACK, M. ORILLO and K. WATANABE. A re-examination of the inheritance of the extreme resistance to PVY, 706 (abst.).
VALLEJO, R.I., W.W. COLLINS, R.D. SCHIAVONE, S.A. LOMMEL and J.B. YOUNG. Extreme resistance to infection by potato virus Y and potato virus X in an advanced hybrid *Solanum phureja-S. stenotonum* diploid potato population, 617.
VANBUREN, A. *see* ISHIMARU, C.A.
van den BERG, R.G. *see* SPOONER, D.M.
VAUGHN, S.F., S.H. JANSKY and S. AUSTIN. Foliage glycoalkaloid content of protoplast fusion hybrids among haploid *Solanum tuberosum* and wild *Solanum* species, 707 (abst.).
VAYDA, M.E. *see* BELKNAP, W.R.
VEILLEUX, R.E. *see* LEVY, D.
VEILLEUX, R.E. and M.M. PAZ. Performance of complex 4x-2x hybrids under heat stress in Virginia, 708 (abst.).
VEILLEUX, R.E. *see* SHEN, L.Y.
WARD, L.J. and S.H. De BOER. Comparison of DNA amplification by PCR and enzyme linked immunoassay for detection of *Erwinia carotovora* subsp. *Atroseptica* in potato plant samples, 708 (abst.).
WARD, L.J. *see* LI, X.
WATANABE, K., M. MORRILLO, M. IWANAGA, R. ORTIZ, R. FREYRE and S. PEREZ. Diploid potato germplasm derived from wild and land race genetic resources, 599.
WATANABE, K.N. *see* VALKONEN, J.P.T.
WATERER, D. Comparison of sap and petiole NO_3 testing in potatoes, 709 (abst.).
WATERER, D.R. *see* BANDARA, M.S.
WATERER, D. *see* LYNCH, D.R.
WEAVER, M. *see* TIMM, G.H.
WEINGARTNER, D.P., K.G. HAYNES, R.W. GOTH and J. MELDRUM. High levels of field resistance to corky ringspot disease exist in USDA families B1136 and B1176, 709 (abst.).
WEINHOLD, A.R. *see* CARLSON, H.L.
WEISZ, R., J. KAMINSKI and Z. SMILOWITZ. Water deficit effects on potato leaf growth and transpiration: Utilizing fraction extractable soil water for comparison with other crops, 829
WERNER, B.K. *see* LOVE, S.L.
WERNER, B.K., B. SHAFII, S.L. LOVE and A. THOMPSON-JOHNS. Comparative seasonal changes in specific gravity among potato clones, 709 (abst.).

WESTERMANN, D.T. *see* JAMES, D.W.
WESTERMANN, D.T., D.W. JAMES, T.A. TINDALL and R.L. HURST. Nitrogen and potassium fertilization of potatoes: Sugars and starch, 433.
WESTERMANN, D.T., T.A. TINDALL, D.W. JAMES and R.L.HURST. Nitrogen and potassium fertilization of potatoes: Yield and specific gravity, 417.
WESTERMANN, D.T. *see* TROUT, T.J.
WESTRA, A.A.G., S.A. SLACK and J.L. DRENNAN. Comparison of some diagnostic assays for bacterial ring rot of potato: A case study, 557.
WHALON, M.E., J.M. WIERENGA and K. MAREDIA. Global Pest Resistant Management Summer Institute, 710 (abst.).
WHALON, M.E., U. RAHARDJA, J. WIERENGA and E. GRAFIUS. Colorado potato beetle resistance to B.t. sprays: Implications for management and transgenic potatoes, 710 (abst.).
WHALON, M.E. and U. RAHARDJA. *Bacillus thuringiensis* resistant Colorado potato beetle detection, 711 (abst.).
WHEELER, T.A., R.C. ROWE, R.M. RIEDEL and L.V. MADDEN. Influence of cultivar to *Verticillium* spp. on potato early dying, 39.
WIELGUS, S.M. *see* McGRATH, J.M.
WIERENGA, J. *see* WHALON, M.F.
WILSON, D.R. *see* GOTH, R.W.
WILSON, D.R. *see* HAYNES, K.G.
WILSON, J. *see* MOJTAHEDI, H.
WORK, T.M. *see* REEVES, A.F.
WORK, R.W., A.F. REEVES and A.A. BUSHWAY. Environmental influence on phenolic acids and glycoalkaloids on purple streak potatoes, 711 (abst.).
WORK, T.M. and A.F. REEVES. Consumer testing of advanced potato selections from the Maine Potato Breeding Program, 711 (abst.).
WYMAN, J.A. *see* BINNING, L.K.
WYMAN, J.A. *see* CONNELL, T.R.
YADA, R.Y. *see* O'DONOGHUE, E.
YANG, C.P. *see* BROWN, C.R.
YENCHO, G.C., R.L. PLAISTED and W.M. TINGEY. Population growth and development of the Colorado potato beetle on NYL 235-4, a *Solanum tuberosum* x *S. berthaultii* hybrid potato clone, 712 (abst.).
YENCHO, G.C., O. PINEDA, R.L. PLAISTED and S. TANKSLEY. Genetic mapping of insect resistance traits in *Solanum berthaultii* and transfer of QTL's from diploid to tetraploid potatoes, 712 (abst.).
YOUNG, J.B. *see* VALLEJO, R.L.
ZALEWSKI, J.C. *see* SHOCK, C.C.
ZAPATA, C., J.C. MILLER, JR. and R.H. SMITH. An *in vitro* procedure to eradicate potato viruses X, Y and S from Russet Norkotah and two of its strains, 713 (abst.).
ZHANG, L. *see* OPENA, G.B.